

Attorney Docket No.: J6835(C)  
Serial No.: 10/767,679  
Filed: January 29, 2004

**BRIEF FOR APPELLANT**

Sir:

This is a Brief on appellant's Appeal from the Examiner's Final Rejection concerning the above-identified application. The Commissioner is hereby authorized to charge any additional fees, which may be required to our deposit account No. 12-1155, including all required fees under: 37 C.F.R. §1.16; 37 C.F.R. §1.17; 37 C.F.R. §1.18.

**BRIEF FOR APPELLANT**

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### **I. REAL PARTY IN INTEREST**

Unilever Home & Personal Care USA, Division of Conopco, Inc. is the real party in interest.

### **II. RELATED APPEALS AND INTERFERENCES**

There are no other prior or pending appeals or interferences or judicial proceedings known to appellant, the appellant's legal representative, or assignee which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending Appeal.

### **III. STATUS OF CLAIMS**

Claims 1-11 are on Appeal. Claims 1-5 are original unamended claims. Claims 6-11 were submitted as new claims prior to the Final Office Action.

### **IV. STATUS OF AMENDMENTS**

No amendments were filed subsequent to the Final Office Action.

### **V. SUMMARY OF CLAIMED SUBJECT MATTER**

Claim 1 concerns a personal care composition that includes a fragrance comprising from about 0.000001 to about 90% of a terpenoid by weight of the fragrance, a salt of malonic acid, and a cosmetically acceptable carrier. See the specification at page 3, paragraph [0009].

Dependent claim 2 identifies the salt of malonic acid as being present as a half neutralized and a fully neutralized acid in a molar ratio ranging from about 1000:1 to about 1:1000. See the specification at page 3 paragraph [00011] and page 5 paragraph [00015].

Claim 3 is dependent through claim 2 further focusing the molar ratio to range from about 2:1 to about 1:200. See the specification at page 5 paragraph [00015].

Dependent claim 4 specifies that the salt has a cationic counterion to malonate which is an inorganic material selected from lithium, sodium, potassium, magnesium, calcium, ammonium and combinations thereof. See the specification at page 4 paragraph [00012].

Dependent claim 5 specifies the salt as being a cationic counterion to malonate which is an organic material having from 2 to 1,000 carbon atoms selected from polyethyleneimine, triethanolamine, diethanolamine, propanolamine, monoethanolamine, methylamine, ethylamine, propylamine, isopropylamine, butylamine, isobutylamine, t-butylamine, pentylamine, isopentylamine, hexylamine, cyclohexylamine, cyclopentylamine, norbornylamine, octylamine, ethylhexylamine, nonylamine, decylamine, pyrrolidone, amino acids, 2-amino-2-methyl-1-propanol, dimethylethanolamine, tris(hydroxymethyl)amino methane and combinations thereof. See the specification at page 4 paragraph [00013].

Dependent claim 6 focuses the concentration of fragrance to an amount from about 0.1 to about 5% by weight of the composition and the terpenoid as being from about 0.1 to about 30% by weight of the fragrance. See the specification at page 6 paragraph [00021].

Dependent claim 7 identifies the terpenoid as selected from acyclic terpenoids, cyclic terpenoids and combinations thereof. See the specification at page 6 paragraph [00020] and page 8.

Dependent claim 8 identifies the terpenoid as an unsaturated aldehyde. See the specification at page 9, line 11 and unsaturated compounds listed thereunder (e.g. Carvone).

Dependent claim 9 focuses the salt of malonic acid into the concentration range from about 0.1 to about 15% by weight of the composition. See the specification at page 5 paragraph [00014].

Dependent claim 10 focuses the salt of malonic acid as present in a range from about 0.5 to about 10% by weight of the composition. See the specification at page 5 paragraph [00014].

Claim 11 dependent through claim 2 identifies the molar ratio as ranging from about 1:1 to about 1:20. See the specification at page 5 paragraph [00015].

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Are claims 1-11 obvious under 35 U.S.C. § 103(a) over U.S. Patent 5,641,495 (Jokura et al.) in view of Guenin et al. (U.S. Patent 6,180,121)?

Are claims claims 1-3 and 5-11 obvious under 35 U.S.C. § 103(a) over Faryniarz et al. (U.S. Patent Application No. 2003/0224023) in view of Guenin et al. (U.S. Patent 6,180,121)?

Are claims 1-3 and 5-11 obvious under 35 U.S.C. § 103(a) over Faryniarz et al. (U.S. Patent Application 2003/02240207) in view of Guenin et al. (U.S. Patent 6,180,121)?

## **VII. APPELLANT'S ARGUMENTS**

**Are claims 1-11 obvious under 35 U.S.C. § 103(a) over U.S. Patent 5,641,495 (Jokura et al.) in view of Guenin et al. (U.S. Patent 6,180,121)?**

Fragrance ingredients when formulated into personal care compositions often lose intensity and they change character with time. One factor responsible for these changes is oxidative degradation. Terpenoids are often included within fragrances. These chemicals are oxidatively sensitive. There is a need for an agent that will prevent oxidative breakdown of the terpenoids.

Appellant has found that salts of malonic acid are effective stabilizers of terpenoids. Malonate salts are particularly useful in preventing oxidation of unsaturated chemical structures.

Jokura et al. disclose a skin cosmetic requiring a combination of three elements. These are a ceramide (A), a dicarboxylic acid (B) and a salt of a dicarboxylic acid (C). This combination and each of the ingredients separately are reported useful for their excellent moisturizing effect. See the Abstract and column 3 (lines 51-52 and 57). Malonic acid is listed among eight other dicarboxylic acids. See column 3, lines 33-37.

Unlike the present invention, Jokura et al. is not concerned with the problem of fragrance component instability, and particularly that of terpenoids. The only concern of the reference is to provide sufficient moisturizing effect while avoiding excessive skin

irritation. Absent any appreciation of the problem, the reference could not possibly suggest a solution.

The term fragrance or perfume is mentioned only once in the reference. See column 5, line 33. "Perfumes" is the very last generic adjunct component among a long list of other possible components (e.g. inorganic salts, viscosity regulating agents, preservatives, UV absorbers, colorants and medicinal components). There is no mention of perfume concentration or any materials which might constitute the perfumes.

None of the Examples include any perfume, either generically or specifically. Neither do any of the Examples itemize a malonic acid or salt thereof as representative of the dicarboxylic acids forming the basis of the reference.

Anyone skilled in the art seeking to stabilize terpenoid ingredients of perfumes or fragrances would not be given the faintest hint in Jokura et al. of any advantage in a combination of malonate and terpenoid.

Guenin et al. was introduced by the Examiner as teaching fragrance enhancing compositions. These were identified as including terpenoids such as d-limonene, citral and geraniol. Focus was also placed on the exemplary fragrance noted as Deo-Key™.

Guenin et al. avers an extended series of objects addressed by the invention. See column 1 (line 62) bridging to column 2 (line 15). Among those objects or problems are to control malodor, improve fragrance efficiency (i.e. reduce the amount of material), limit irritation and enhance masking ability against underarm odor. None of the objects of the invention are directed at combating oxidative instability.

Apparently Guenin et al. is cited by the Examiner merely to demonstrate that terpenoids are fragrance components and that they are present at appellant's claimed concentrations in fragrances.

A combination of Jokura et al. in view of Guenin et al. would not render the instant invention obvious. Neither of the references is concerned with the problem of oxidative instability of fragrance components, and certainly not of terpenoids. Appellant cannot see how anyone skilled in the art focusing on the oxidation problem would arrive at a malonate salt to solve that problem. The term "perfume" is given a single mention in the primary reference. None of the Examples list perfume among the formula materials. Indeed, Jokura et al. does not even exemplify a malonate salt containing formula. There simply is no juxtaposition or relationship between perfumes and malonates in the primary reference. Guenin et al. does not remedy these deficiencies. The reference simply stands for the proposition that perfumes or fragrances can contain terpenoids. There is neither teaching nor suggestion nor incentive for fortifying terpenoid fragrance compositions with a malonate anti-oxidative agent. For all these reasons, a combination of Jokura et al. in view of Guenin et al. would not render the instant invention obvious.

Against the claims the Examiner has cited *In re Aller*, 105 USPQ 233 (CCPA 1955) for the dicta "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation."

A reading of *In re Aller* reveals that the case concerns a process claim. A single reference was applied against the process claim disclosing process conditions of temperature and concentration slightly different from those claimed.



Unlike the facts of *In re Aller*, the present invention is focused upon a composition rather than a process. Secondly, the Examiner has applied and requires two references to delineate the elements of the claimed invention. Thus, the general conditions of the claim are not disclosed in a single reference. There is simply no issue in the present application concerning the discovery of any optimum or workable ranges that could be determined by routine experimentation. Instead the Examiner presents two references unrelated to one another, with unrelated problems/solutions and through hindsight chooses claim elements selectively from each of these references. This is a rejection based upon hindsight reconstruction.

#### Claims 2, 3 and 11

Appellant requests the Board to separately consider dependent claims 2, 3 and 11. These claims recite the presence of the half and fully neutralized acid forms of malonic acid, these being in a molar ratio ranging from about 1000:1 to about 1:1000. In claim 3 the respective ratio is narrowed to about 2:1 to about 1:200. Claim 11 further narrows the ratio to from about 1:1 to about 1:20.

Jokura et al. discloses the unneutralized acid (component B) and the partially neutralized acid (component C). The free acid can only co-exist with a partially neutralized salt because of pKa considerations. There is thus no disclosure of a fully neutralized malonic acid (see formula II at page 3).

The Examiner has highlighted the reference as teaching a molar ratio of carboxylic acid to dicarboxylic acid salt as being from 1:9 to 9:1. Attention was drawn to column 3, lines 35-60. This ratio is different from that presently claimed. Jokura et al. has a ratio of free acid to fully neutralized acid. By contrast, appellant claims a ratio of

mono to di-neutralized (i.e. half to fully neutralized) malonic acid. The ratio does not involve free acid.

The Examiner may argue that Jokura et al. teaches a large pH range traversing from 3 to 9. Superficially this may be viewed as a teaching for the chemist to adjust neutralization to achieve half and fully neutralized acid salt.

The problem with the pH argument is that Jokura et al. require the presence of free dicarboxylic acid. There clearly is a tension between the Jokura et al. requirement of a substantial free acid presence and the recitation of the pH rainbow. Those skilled in the art reading the reference would focus upon the requirement of a free dicarboxylic acid. The latter is mentioned in the Abstract and the independent claim 1. The pH range occurs in neither the abstract nor the main independent claim. As explained *vide supra*, any neutralization which attempts to maintain free acid will not achieve the presence of a di-neutralized salt form. Only the free acid and the mono-salt can be there present in equilibrium. The skilled chemist being taught by the reference to maintain free dicarboxylic acid will only neutralize sufficient to maintain that acid and thereby not achieve the di-salt.

**Are claims 1-3 and 5-11 obvious under 35 U.S.C. § 103(a) over Faryniarz et al. (U.S. Patent Application No. 2003/0224023) in view of Guenin et al. (U.S. Patent 6,180,121)?**

Faryniarz '023 has an earliest U.S. filing date of May 29, 2002. The present application claims priority from a Provisional application filed March 17, 2003. Both Faryniarz '023 and the present application are owned by the same entity, with all the inventors having had an obligation of assignment to this same entity. Accordingly, Faryniarz '023 is not a reference against the claims under § 103. See § 103(c)(1).

Guenin et al. does not disclose malonates. This reference alone does not present a prima facie case of obviousness.

In the Advisory Action the Examiner maintains that the Faryniarz et al. publication was incorrectly disqualified as prior art under 35 U.S.C. § 103(c). In particular, appellant was criticized for not averring that the reference and present appellant had a common assignee "at the time the invention was made". Appellant here states that all inventors of the invention in U.S. Patent Application 2003/0224023 and those of the presently claimed invention all had an obligation of assignment to the same entity at the time the present invention was made.

**Are claims 1-3 and 5-11 obvious under 35 U.S.C. § 103(a) over Faryniarz et al. (U.S. Patent Application 2003/02240207) in view of Guenin et al. (U.S. Patent 6,180,121)?**

Faryniarz '027 has an earliest U.S. filing date of May 29, 2002. The present application claims priority from a Provisional application filed March 17, 2003. Both Faryniarz '027 and the present application are owned by the same entity, with all the inventors having had an obligation of assignment to this same entity. Accordingly, Faryniarz '027 is not a reference against the claims under § 103. See § 103(c)(1).

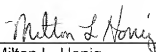
Guenin et al. does not disclose malonates. This reference alone does not present a prima facie case of obviousness.

In the Advisory Action the Examiner maintains that the Faryniarz et al. publication was incorrectly disqualified as prior art under 35 U.S.C. § 103(c). In particular, appellant was criticized for not averring that the reference and present appellant had a common

assignee "at the time the invention was made". Appellant here states that all inventors of the invention in U.S. Patent Application 2003/0224027 and those of the presently claimed invention all had an obligation of assignment to the same entity at the time the present invention was made.

In view of the foregoing comments, appellant requests the Board of Patent Appeals and Interferences to reverse rejection of the claims.

Respectfully submitted,

  
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201-894-2403

## VIII. CLAIMS APPENDIX

Claim 1. A personal care composition comprising:

- (i) from about 0.001 to about 10% of a fragrance by weight of the composition comprising from about 0.000001 to about 90% of a terpenoid by weight of the fragrance;
- (ii) from about 0.0001 to about 30% by weight of the composition of a salt of malonic acid; and
- (iii) from about 1 to about 99% by weight of the composition of a cosmetically acceptable carrier.

Claim 2. The composition according to claim 1 wherein the malonic acid is present as a half neutralized and a fully neutralized acid in a molar ratio ranging from about 1000:1 to about 1:1000, respectively.

Claim 3. The composition according to claim 2 wherein the molar ratio is about 2:1 to about 1:200.

Claim 4. The composition according to claim 1 wherein the salt has a cationic counterion to malonate which is an inorganic cation selected from the group consisting of lithium, sodium, potassium, magnesium, calcium, ammonium and combinations thereof.

Claim 5. The composition according to claim 1 wherein the salt has a cationic counterion to malonate which is an organic cation having from 2 to 1,000 carbon atoms selected from the group consisting of polyethyleneimine, triethanolamine, diethanolamine, propanolamine, monoethanolamine, methylamine, ethylamine, propylamine, isopropylamine, butylamine, isobutylamine, t-butylamine, pentylamine, isopentylamine,

hexylamine, cyclohexylamine, cyclopentylamine, norbornylamine, octylamine, ethylhexylamine, nonylamine, decylamine, pyrrolidone, amino acids, 2-amino-2-methyl-1-propanol, dimethylethanolamine, tris(hydroxymethyl)amino methane and combinations thereof.

Claim 6. The composition according to claim 1 wherein the fragrance is present in an amount from about 0.1 to about 5% by weight of the composition and the terpenoid comprises from about 0.1 to about 30% by weight of the fragrance.

Claim 7. The composition according to claim 1 wherein the terpenoid is selected from the group consisting of acyclic terpenoids, cyclic terpenoids and combinations thereof.

Claim 8. The composition according to claim 1 wherein the terpenoid is an unsaturated aldehyde.

Claim 9. The composition according to claim 1 wherein the salt of malonic acid is present in an amount from about 0.1 to about 15% by weight of the composition.

Claim 10. The composition according to claim 1 wherein the salt of malonic acid is present in an amount from about 0.5 to about 10% by weight of the composition.

Claim 11. The composition according to claim 2 wherein the molar ratio is from about 1:1 to about 1:20.

IX. EVIDENCE APPENDIX

None.

X. RELATED PROCEEDINGS APPENDIX

None.